**FIGURE 1**

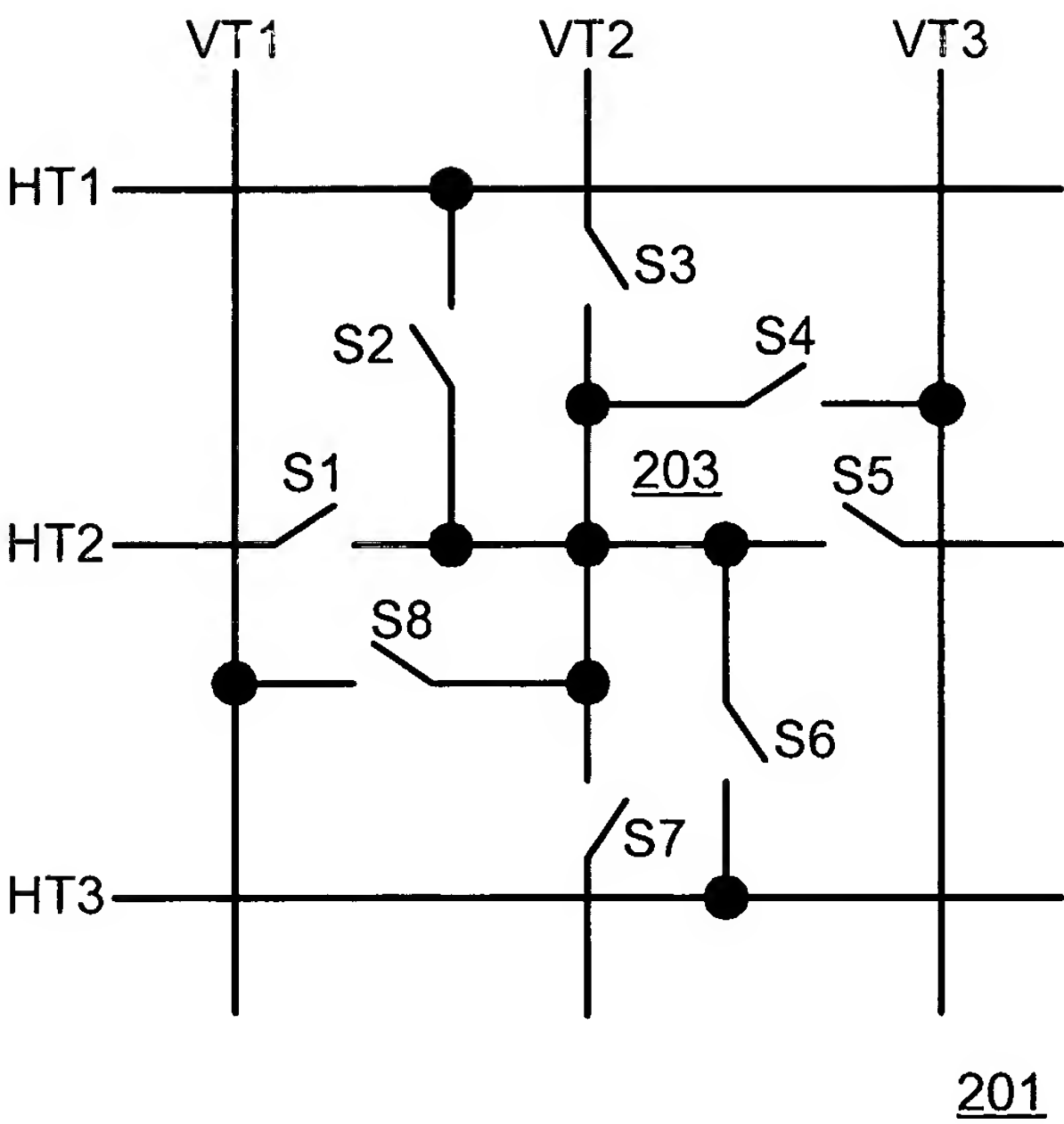
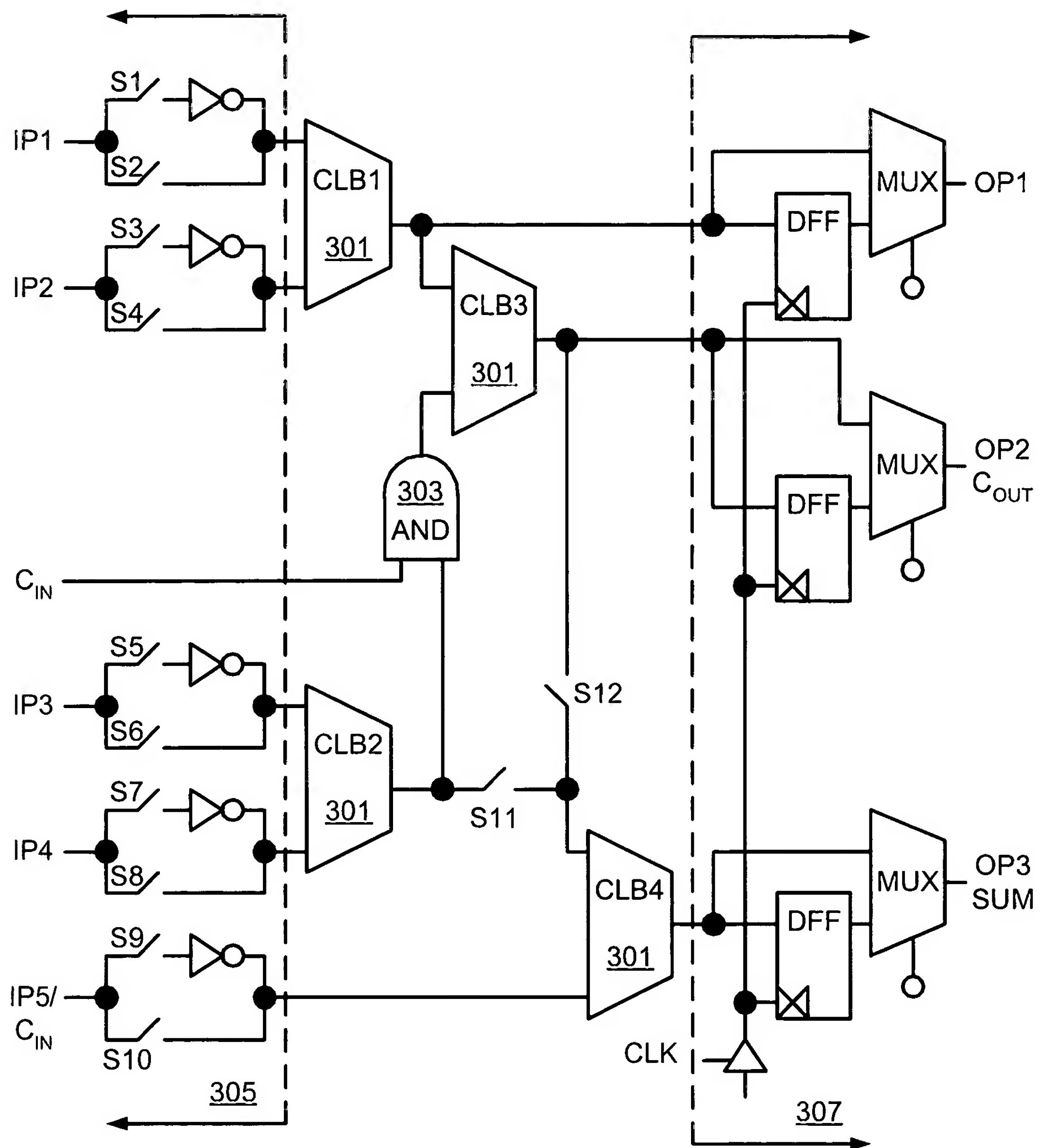
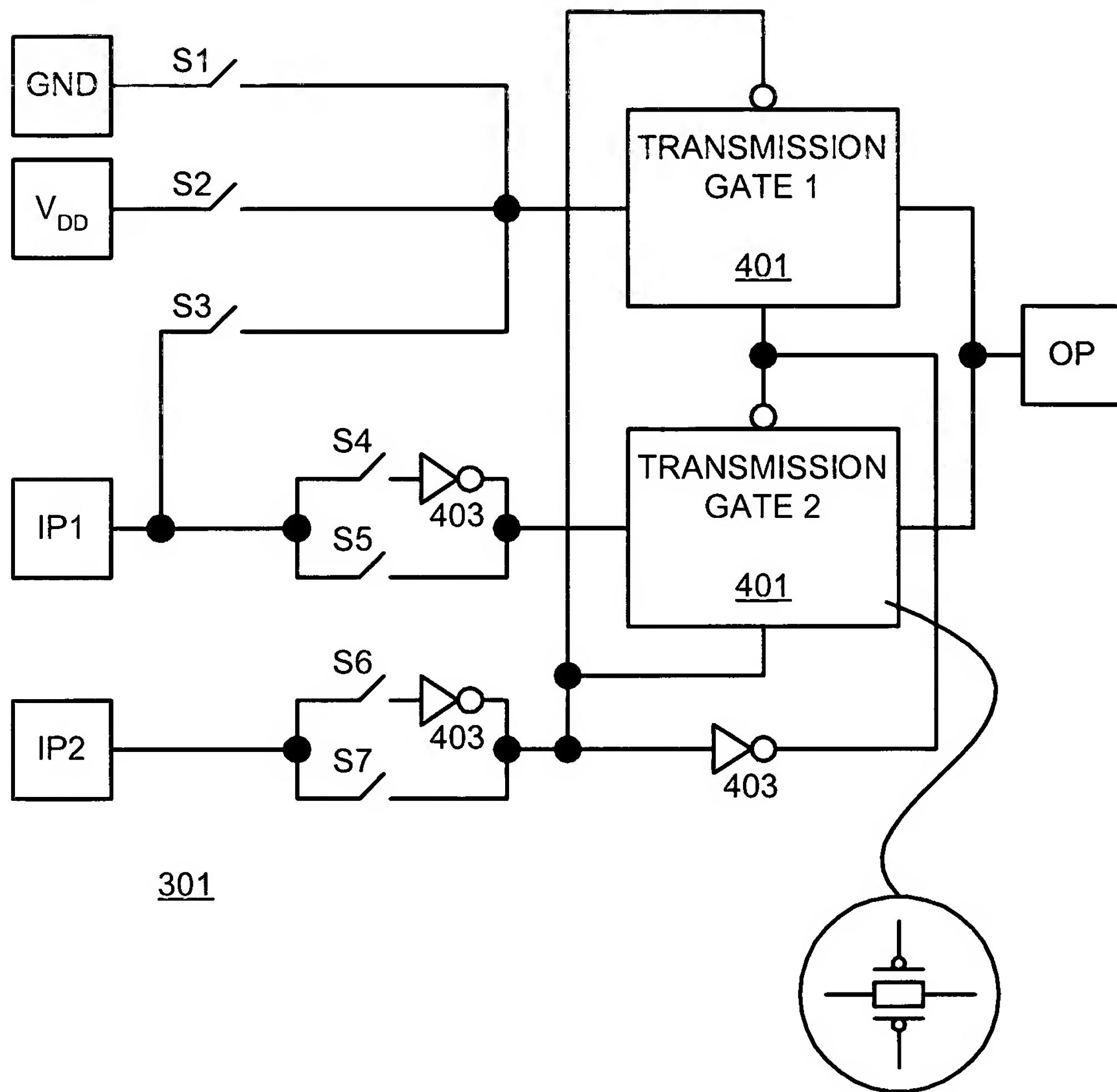


FIGURE 2



CLB : CASCADABLE LOGIC BLOCK

FIGURE 3

**FIGURE 4**

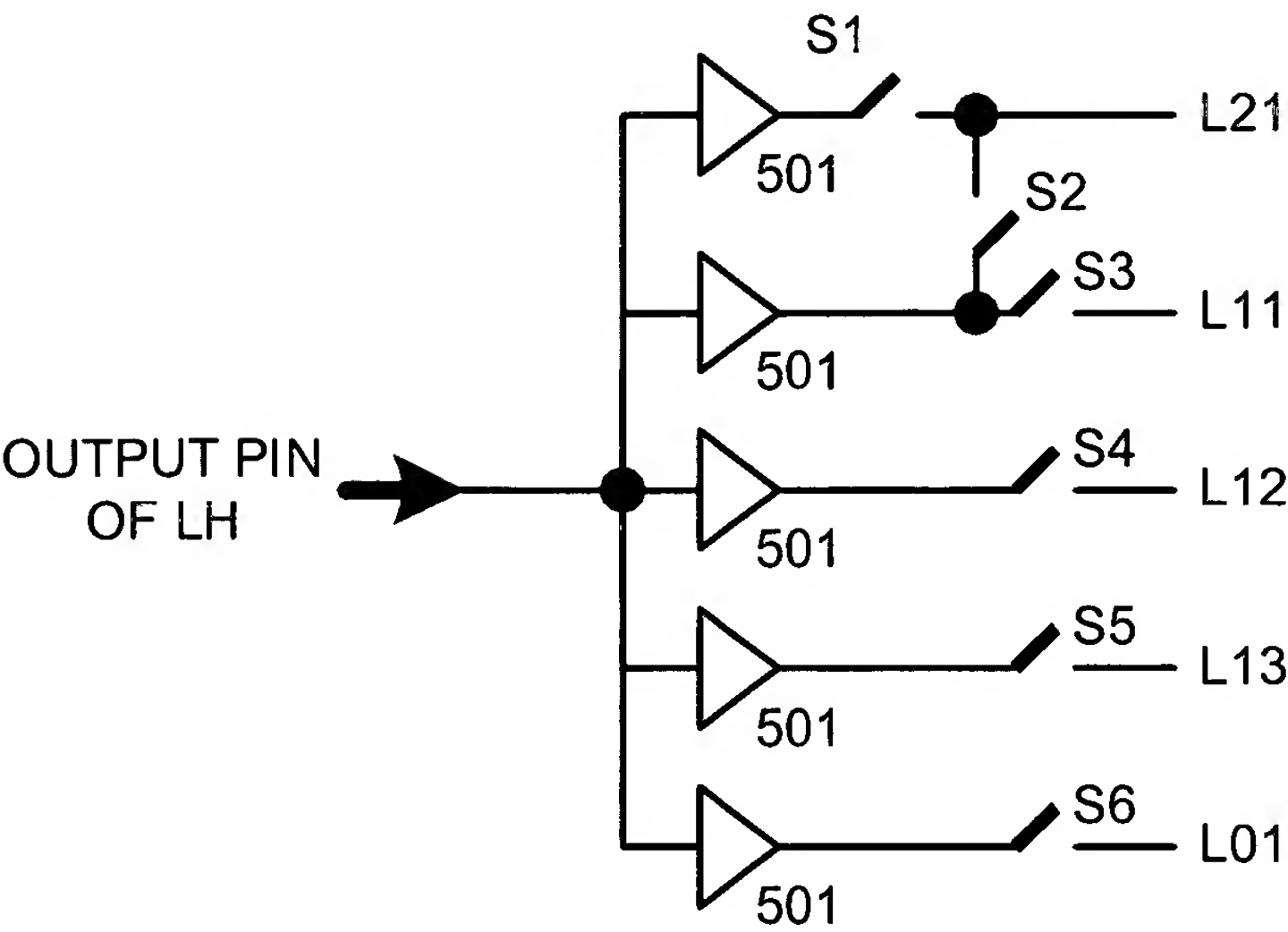
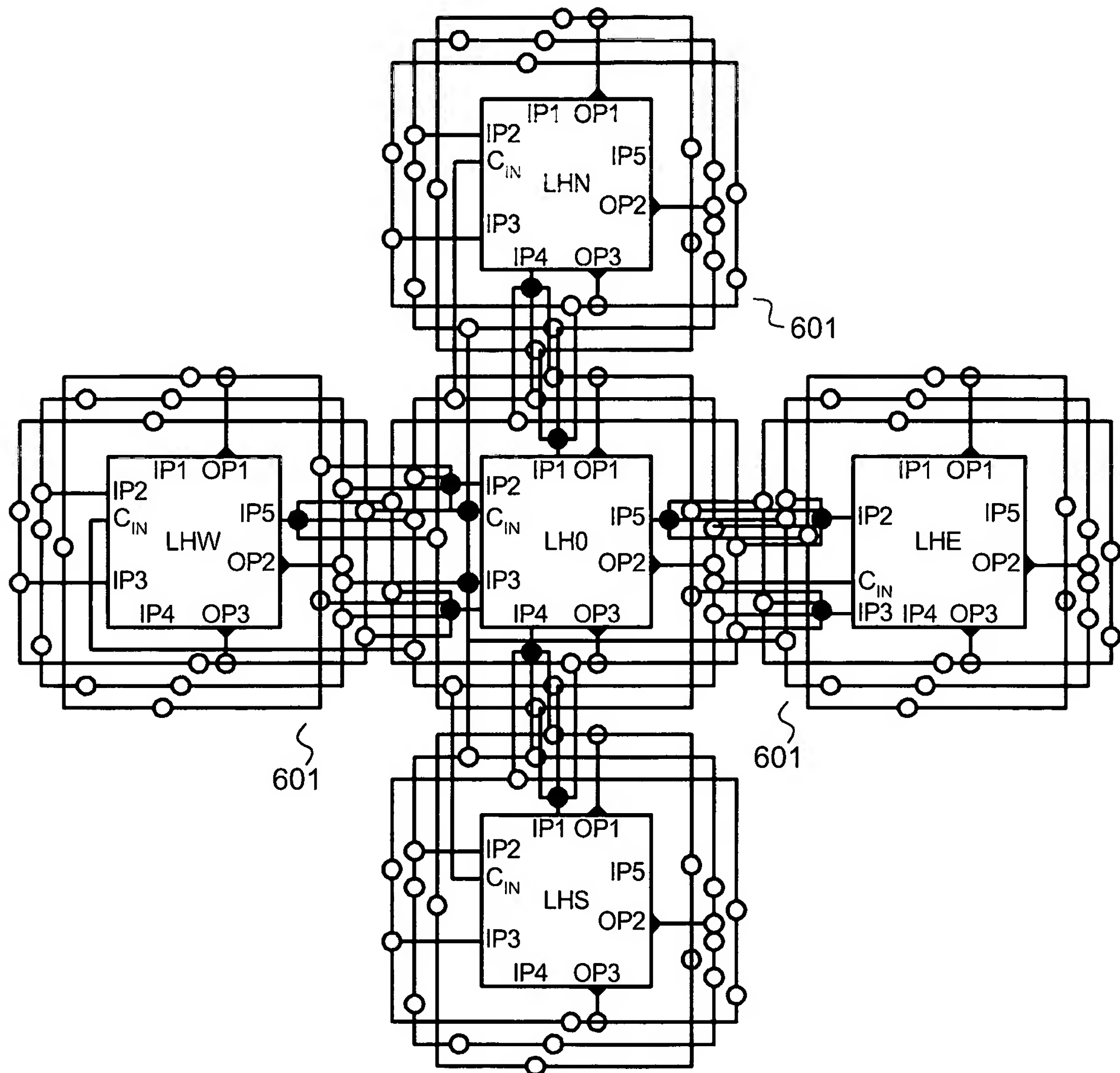


FIGURE 5



- PASS TRANSISTOR OR SWITCH
- HARD WIRED
- ▼ BUFFER

FIGURE 6

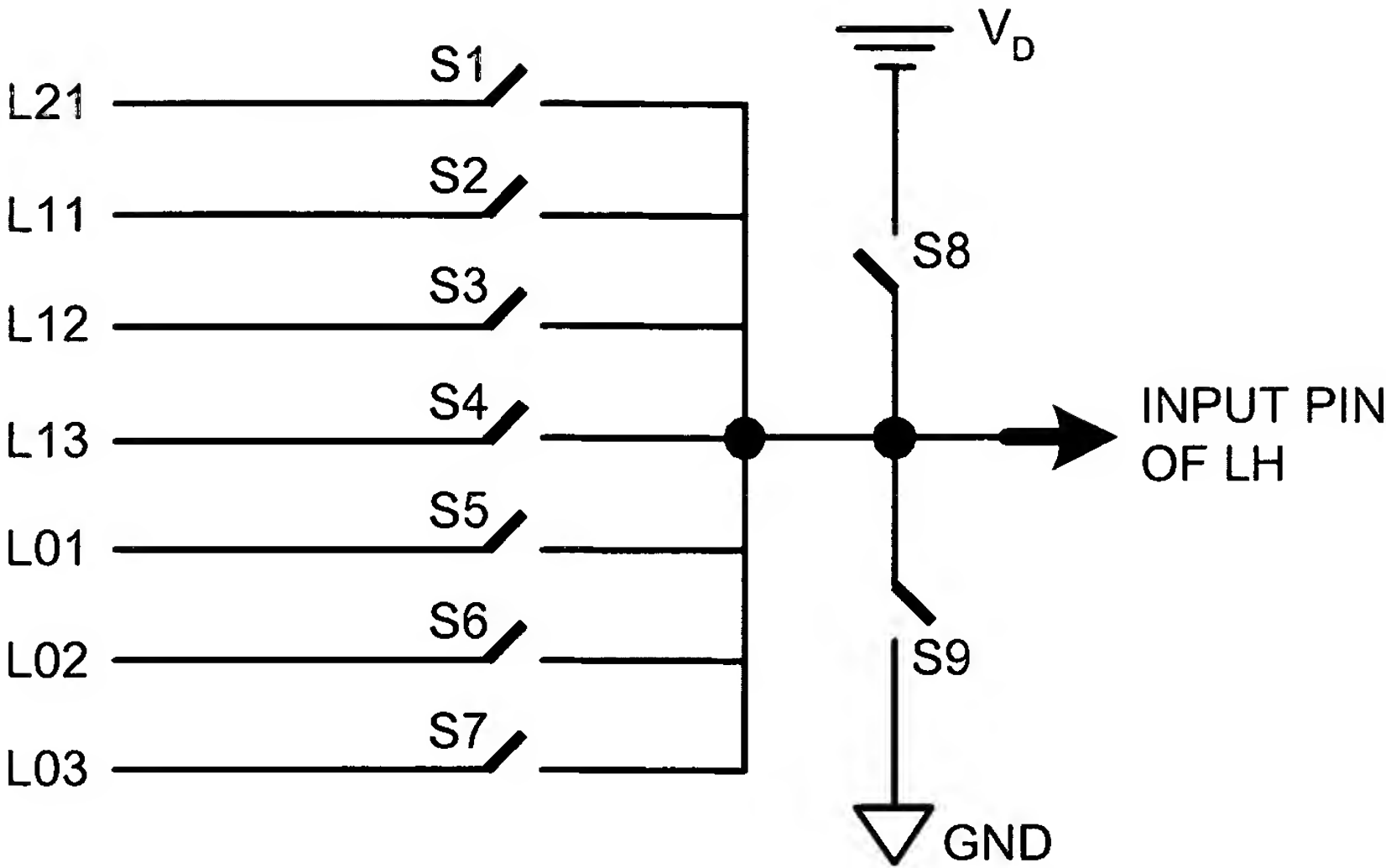


FIGURE 7

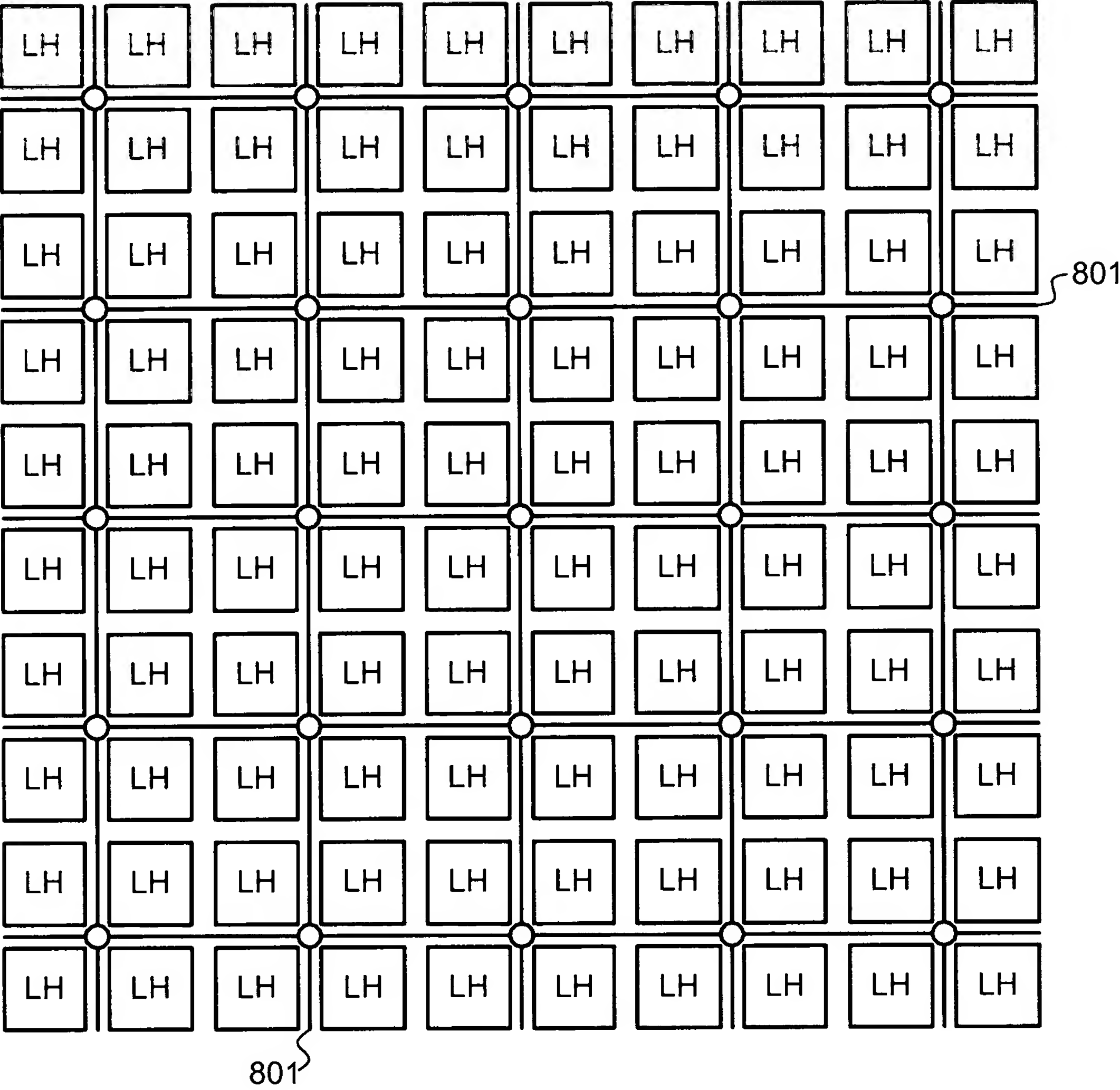


FIGURE 8

SWITCH	S1	S2	S3	S4	S5	S6	S7	EQUATION
AND2	✓	✗	✗	✗	✓	✗	✓	$OP = IP1 \& IP2$
NAND2	✗	✓	✗	✓	✗	✗	✓	$OP = !(IP1 \& IP2)$
OR2	✗	✓	✗	✗	✓	✓	✗	$OP = IP1 IP2$
NOR2	✓	✗	✗	✓	✗	✓	✗	$OP = !(IP1 IP2)$
XOR2	✗	✗	✓	✓	✗	✗	✓	$OP = (IP1 \& !IP2) (!IP1 \& IP2)$
XNOR2	✗	✗	✓	✓	✗	✓	✗	$OP = (IP1 \& IP2) (!IP1 \& !IP2)$

NOTE: ✓ : SWITCH ON ✗ : SWITCH OFF

FIGURE 9

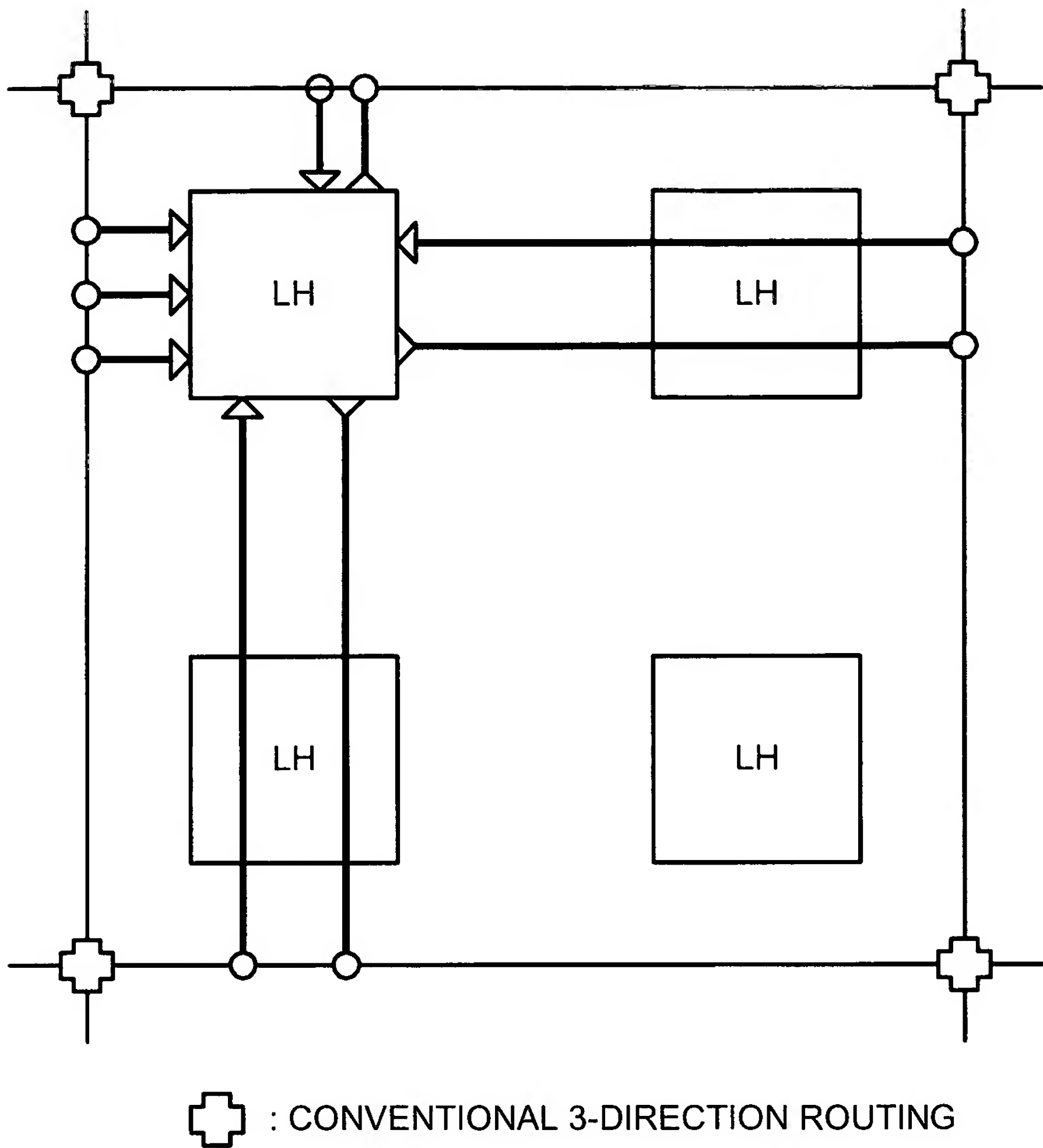


FIGURE 10